

REMARKS

In the Office Action, claims 169, 177 and 179 were objected to because of the informalities that claim 169 references a “muralyl dipeptide” which should read --muramyl dipeptide--; claim 177 references the same polypeptide twice; and claim 179 references different antigens without specifying their genomic origins. Applicant has amended claims 169, 177 and 179, as suggested in the Office Action. Therefore, the objections should be withdrawn.

In the restriction requirement, the present application was divided into thirty two (32) allegedly distinct, and thus unrelated, inventions. In particular, the allegedly distinct inventions were listed as:

- I. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 4-27 of HIV gp120, classified in class 424, subclass 188.1.
- II. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 54-76 of HIV gp120, classified in class 424, subclass 188.1.
- III. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 50-541 of HIV gp41, classified in class 424, subclass 188.1.
- IV. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 254-295 of HIV RT (p66/55), classified in class 424, subclass 188.1.

- V. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 69-94 of HIV PR (p10), classified in class 424, subclass 188.1.
- VI. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 166-181 of HIV CA (p24), classified in class 424, subclass 188.1.
- VII. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 390-410 of HIV NC (p7), classified in class 424, subclass 188.1.
- VIII. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 438-443 of HIV NC (p7), classified in class 424, subclass 188.1.
- IX. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 2-23 of HIV MA (p17), classified in class 424, subclass 188.1.
- X. Claims 159-177, 180-182, 187 and 188, drawn to a vaccine composition comprising a viral polypeptide corresponding to amino acids 89-122 of HIV MA (p17), classified in class 424, subclass 208.1.
- XI. Claims 159-174, 178, 179, 180-182, 187 and 188, drawn to a vaccine composition comprising a deglycolylated HIV gp120, classified in class 424, subclass 208.1.
- XII. Claims 159-174, 178, 179, 180-182, 187 and 188, drawn to a vaccine composition comprising a deglycosylated HIV gp41, classified in class 424, subclass 208.1.

- XIII. Claims 159-174, 178, 179, 180-182, 187 and 188, drawn to a vaccine composition comprising a deglycosylated HIV CA (p24), classified in class 424, subclass 208.1.
- XIV. Claims 159-174, 178, 179, 180-182, 187 and 188, drawn to a vaccine composition comprising a deglycosylated HIV NC (p7), classified in class 424, subclass 208.1.
- XV. Claims 159-174, 178, 179, 180-182, 187 and 188, drawn to a vaccine composition comprising a deglycosylated HIV PR (p10), classified in class 424, subclass 208.1.
- XVI. Claims 159-174, 178, 179, 180-182, 187 and 188, drawn to a vaccine composition comprising a deglycosylated HIV RT (p66/55), classified in class 424, subclass 208.1.
- XVII. Claims 159 and 183, drawn to a vaccine composition comprising a combination of multiple viral immunogens, classified in class 424, subclass 202.1.
- XVIII. Claims 159, 185, and 186, drawn to a vaccine composition comprising an epitope that corresponds to human α -fetal protein, classified in class 424, subclass 184.1.
- XIX. Claims 159, 185 and 186, drawn to a vaccine composition comprising an epitope that corresponds to aspartyl protease, classified in class 424, subclass 184.1.
- XX. Claims 159, 185 and 186, drawn to a vaccine composition comprising an epitope that corresponds to deoxyuridine-triphosphate nucleotidohydrolase, classified in class 424, subclass 184.1.
- XXI. Claims 159, 185 and 186, drawn to a vaccine composition comprising an epitope that corresponds to eosinophil cationic protein, classified in class 424, subclass 184.1.

- XXII. Claims 159, 185 and 168, drawn to a vaccine composition comprising an epitope that corresponds to eosinophil-derived neurotoxin, classified in class 424, subclass 184.1.
- XXIII. Claims 159, 185 and 186, drawn to a vaccine composition comprising an epitope that corresponds to a ribonuclease-4-precursor, classified in class 424, subclass 184.1.
- XXIV. Claims 189-196, drawn to a vaccine composition comprising a nucleic acid encoding a modified Gag polypeptide, classified in class 536, subclass 23.72.
- XXV. Claims 189-196, drawn to a vaccine composition comprising a nucleic acid encoding a modified Pol polypeptide, classified in class 536, subclass 23.72.
- XXVI. Claims 189-196, drawn to a vaccine composition comprising a nucleic acid encoding a modified Env polypeptide, classified in class 536, subclass 23.72.
- XXVII. Claims 197-208, drawn to a vaccination method employing a modified Gag polypeptide, classified in class 424, subclass 208.1.
- XXVIII. Claims 197-208, drawn to a vaccination method employing a modified Pol polypeptide, classified in class 424, subclass 208.1.
- XXIX. Claims 197-208, drawn to a vaccination method employing a modified Env polypeptide, classified in class 424, subclass 208.1.
- XXX. Claims 209-220, drawn to a vaccination method employing a nucleic acid encoding a modified Gag polypeptide, classified in class 536, subclass 23.72.
- XXXI. Claims 209-220, drawn to a vaccination method employing a nucleic acid encoding a modified Pol polypeptide, classified in class 536, subclass 23.72.

XXXII. Claims 209-220, drawn to a vaccination method employing a nucleic acid encoding a modified Env polypeptide, classified in class 536, subclass 23.72.

The Office Action conclusively stated the following:

- (i) inventions 1-23 are unrelated because “[t]he modified polypeptides do not share any common structural features and will all necessitate independent searches;”
- (ii) inventions 24-26 are unrelated because “[t]he modified nucleotides do not share any common structural features and will all necessitate independent searches;”
- (iii) inventions 1-23 and 24-26 are unrelated because “the various groups do not share a common structural feature, separate searches will be required for each group;”
- (iv) inventions 27-29 and 30-32 are unrelated because “each group is directed toward a methodology that employs structurally and functionally different reagents;”
- (v) inventions 1-23 and 30-32 are unrelated because “the methodologies of groups 27-29 neither require nor utilize the nucleic acids of groups 24-26;”
- (vi) inventions 1-23 and 27-29 are related but distinct because “each of the modified viral polypeptides can be employed in a materially different methodology such as affinity purification or enzymatic assays;” and
- (vii) inventions 24-26 and 30-32 are related but distinct because “the nucleic acids of groups 24-26 can be used in a materially different process such as hybridization assays to detect virus.”

However, Applicant respectfully traverses the restriction requirement for the following reasons.

With respect to the Office Action’s restriction requirement for (i) – (v), the Office Action fails to provide any support for its conclusory statements. Since the Office Action failed to state

what serious burden would be imposed on the examiner if restriction is not required, Applicant respectfully requests that the restriction requirements for (i) – (v) be withdrawn. See MPEP §808.02.

With respect to the Office Action's restriction requirements for (vi) – (vii), the Office Action failed to provide an example for such restriction requirements. See MPEP §806.05(j). Accordingly, Applicant respectfully requests that the restriction requirement for (vi) – (vii) be withdrawn.

Further, Applicant respectfully submits that claim 159 is a genus claim linking all pending dependent claims therefrom because it links each of the above inventions, which are all derived from the modified viral polypeptide of claim 159. Inasmuch as claim 159 is genus/linking claim to species inventions as set forth in the Office Action for the restriction requirements, should such linking claim be allowable, all of the above inventions become subject to examination and the restriction requirement between the linked inventions must be withdrawn. See MPEP §809.

In any event, should the restriction requirement not be withdrawn, then Applicant provisionally elects, with traverse, Group I (i.e., claims 159-177, 180-182, 187 and 188). Applicant believes requiring such an election is improper for the reasons stated above but also because, as admitted in the Office Action, all of the claims in Group I are in class 424, subclass 188.1. Thus, a search regarding all of the claims in Group I would not pose an undue burden.

Nevertheless, Applicant provisionally elects, with traverse, because 37 C.F.R. 1.143 requires that such an election be made even though it is with traverse. Accordingly, Applicant provisionally elects claims 59-177, 180-182, 187 and 188.

Should the Examiner have any questions or concerns, the Examiner is requested to contact the undersigned at (312) 226-1818.

Dated: November 28, 2005

Respectfully Submitted,


FACTOR & LAKE, LTD.

A handwritten signature in black ink, consisting of several loops and a horizontal line at the end.

Nick S. Lee, Esq.
Attorney for Applicant

CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 28, 2005.

A handwritten signature in black ink, identical to the one above, with the name "Nick S. Lee" printed below it.

Nick S. Lee